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NPIC/TDS/EP-537-67
29 August 1967

ACCEPTANCE TEST

SUBJECT: Super-Wide Print Straightener

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1. Introduction: The [redacted] Super-Wide Print Straightener developed by NPIC (DS) has been delivered to EPS. Informal testing and repairing has been going on since 13 July 1967. This Test for T&E is intended to result in a report covering acceptance tests but not development, reliability, or maintainability tests. The Super-Wide Print Straightener as repaired and modified at the start of this planned T&E will be considered the Base Line Configuration.

2. Acceptance Test (Acceptance conditions have not yet been specified explicitly).

a. Operating and Maintenance Instructions will be examined for compliance with the requirements of the contract and for conformance with the machine.

b. The schematic diagram will be examined for compliance with the requirements of the contract.

c. The dimensions of the Super-Wide Print Straightener likewise.

d. Contractually specified components will be checked for conformance.

e. Marking of the controls will be examined for compliance with the requirements of the contract.

f. Conformance of the Super-Wide Print Straightener with the engineering drawings and the electrical schematic will be checked.

g. The purpose of this test is to provide data for the determination of the warm-up time. The Super-Wide Print Straightener will be filled with tap water (the instructions call for distilled water) and allowed to stand overnight with the power turned off. The temperature of the water will be monitored between several baffles as a function of time from the time the power is turned on. The condition of operation will be 1) d.c. motor control at 60 on the dial, 2) smallest motor pulley installed, 3) the rear most cloth belt roller will be securely fastened in the position chosen by the factory's representative 4) belt travelling in the forward (normal) direction only after the water temperature either is near its steady state condition or has been warming up for 2 hours. Factory adjustment as modified by the project monitor will not be disturbed (Base Line Configuration).

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h. The purpose of this test is to determine the ability of the Super-Wide Print Straightener to operate continuously for 8 hours with no addition of make-up water. The water will be drained with the machine in the Base Line Configuration until no more water comes out of the drain. At 0800 hours water from the hot water tap (the instructions call for distilled water) will be used to fill (after closing the drain) the tank to the top mark. The power will be turned on and 8 hours later the water level in the sight glass will be noted. Water level sensing switch will be monitored to establish the time it shuts the heater off if less than 8 hours. The water level will be noted once more when the power is turned off at 1625 hours. The conditions of operation will be 1) d.c. motor control at 60 on the dial, 2) smallest motor pulley in use, 3) the rear most cloth belt roller will be securely fastened in the position chosen by the factory's representative, 4) belt travelling in the forward (normal) direction only after the water temperature either is near its steady state condition or has been warming up for 2 hours. Factory adjustment as modified by the project monitor will not be disturbed (Base Line Configuration).

i. The purpose of this test is to provide data on the amount of straightening the Super-Wide Print Straightener accomplishes. One or more objective measures of print curl will be chosen when the test is to be performed. Print stock (no larger than 30 1/8" X 40") obtained from and processed by [redacted] group will be used as the test prints. Still pictures will be taken showing the curl of the test prints before and after straightening. At each of three motor speeds 3 prints of single weight and 3 prints of double weight stock will be straightened. The chosen measures of print curl will be applied to obtain the necessary data. The conditions of operation will be 1) fully warmed-up, 2) d.c. motor control at selected settings (the middle setting to be 60 on the dial), 3) the rear most cloth belt roller will be securely fastened in the position chosen by the factory's representative, 4) the test prints fed from a position flat on the feed tray. This test can be done either just following test g or during test h.

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j. The purpose of this test is to determine whether or not the level sensing switch and the red warning light function properly. With a clamp-on ammeter monitoring the current to the Super-Wide Print Straightener the drain will be opened so that the water drains into a suitable container. After the water has drained out it will be noted whether or not the heater was turned off and the warning light turned on. The depth of water remaining will be noted.

k. The purpose of this test is to see if the specified maximum current drain of 20 amperes is exceeded. A clamp-on ammeter will be monitored from time to time during the tests above.

l. The purpose of this test is to observe and record any damage done to the prints during straightening. All visible defects and damage on the test prints for test i are to be marked prior to the performance of test i. The measurements of all unmarked damage on the prints following test i will be recorded.

m. Safety aspects as such will not be tested or evaluated as they have already been reported verbally to DS/TDS.

n. With regard to paragraphs 2 g. and 2 h. it should be noted that paragraph A. 5 of the Operating and Maintenance Instructions call for, motor speed control - power on, motor forward, speed at approximately 40.

3. Test Report

The report will cover the objective test results, conclusions, and recommendations stemming from the acceptance test. This report should be out by October 1967 if [redacted] and other parties involved cooperate on a timely basis. 25X1

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Equipment Performance Staff, TDS